3GPP TSG CN Plenary Meeting #26   **NP-040517**

8th – 10th December 2004 Athens, Greece.

Source:	**CN4 Chairman**
Title:	**Status report from CN4 to TSG-CN Plenary Meeting #26**
Agenda item:	**6.1.4**
Document for:	**INFORMATION**

1   Introduction

CN4 have had one meeting since the last CN plenary meeting. CN4#25 was held in Seoul, Korea, on 15th – 19th November 2004, kindly hosted by the Samsung. Due to the high number of contributions we had to have parallel sessions again. This gives the vice chairs Toshiyuki Tamura (NEC) the opportunity to chair sessions on CAMEL and the other vice chair Peter Wild (Vodafone) to chair sessions on GUP. Kimmo Kymäläinen (MCC) was there as usual, making sure we did things properly. We have handled **470** documents, agreed **113** change requests, **16** output liaison statements, **2** revised work item descriptions, **1** new work item description and agreed to send **1** specification for information and **1** report for approval. There were **45** participants representing **30** companies, plus Kimmo for the MCC.

The draft meeting report of CN4#25 was distributed to the CN4 email list; it is still under review and is provided in Tdoc NP-040518 for information. The draft meeting report of CN4#. The CN4 outgoing liaison statements are provided in Tdoc NP-040519 for information.

2   Management summary

2.1   Release 6

Generic User Profile

TS 24.241 is moved to Rel-7 time frame to keep the GUP data if needed. SA1 is asked to remove the TS from the WID.

TS23.241 is agreed to be transformed into a TR. (NP-040539)

Discussion has taken place on the alignment of GUP and Presence, and their Protocol Choice. CN1 decided to use XCAP as an option to retrieve Presence information. XCAP is a light protocol but for each service the usage of XCAP needs to be investigated in which way it should be used. This might be an issue for Rel-7.

It was agreed to have a normative ANNEX which contains the SOAP bindings for Rel-6 and possible options in further releases.

We continued the discussion on GUP schema structure. No agreement could be reached neither to use multiple schemas nor to use a single universal/global schema. The important issue is to keep the possibility that AS do not need to be updated if a component is added either as a single component or as part of the universal schema. Further investigation is needed for the single schema approach to reflect the requirements of versioning, forward and backward compatibility

29.240 0.7.1 is agreed to be send to plenary for information. It will be raised to Version1.0.0 (NP-040538)

Open issue:

- details of the security solution

- access control: choices of condition languages
- GUP profile schema structure:
  1. Schema design framework.
  2. Schema alignment with Liberty Alliance (common attributes).
  3. Concrete schema for subset of GUP profile schema (final version of HSS component)
- replace Soap bindings in specification text with abstract headers and put Soap bindings into a normative Annex We prefer defining just SOAP binding without any additional abstract layer
- Component definitions and their usage are inadequately defined
- GCL is inadequately described
- Metadata concept is unclear
- Liberty DST usage (include) unclear (schemas)
- Profile definition in 8.4.2 is not according to chapter 8.3, Liberty DST guidelines nor TS 23.241.
- Filter in Select not described (query is just one kind of use of select)
- Rg definition checking (currently copied from Rp definition)
- Annex B: WSDL definitions
- Annex C: XML Schema definitions
- Style needs revisioning (e.g. using "we", "LA" is no official term, ...)

Issues / feature candidate for Rel-7:

- bandwidth saving and performance solution, could be the compression method provided by ITU converting XML schema to ASN.1
- additional transfer options (for Rel-6 Soap/WSDL is the only transfer option specified)

Status

70% completed.

29.240 is expected to be send to plenary CN#27: for approval.

CN4 ask for an exception for GUP, GUP should be a release 6 feature

Subscriber Certificates (NP-040580)

The service specific authorization flag codes are agreed to be summarized in normative manner in an annex of TS 29.109. SA3 has requested to add UICC type and Lifetime information to the GBA User security setting. We agreed a CR to add bsfInfo element to the GUSS. A standard internal structure for GAA-Service-Identifier is added to 29.109. We identified different terms which are different in stage 2 and stage 3 and agreed on CRs to align the terms used in the different specifications.

New messages Bootstrapping-Info-Request/Answer are agreed to be introduce, because the functionality of the message is seen different compared with the Multimedia-Auth-Request (MAR) message.

Open issue:

Details of Error Handling in 29.109: allocation of error codes and description.

Status

Work is seen as completed.

Wireless LAN interworking (NP-040581)

We agreed that charging data shall be send after sucessful authorisation of the user for the requested W-APN and on the format of that data. The decorated NAI shall be in the same format than 'Homerealm' but with the PLMN ID (visitedMCC and visitedMNC) of the selected PLMN (**wlan.mnc**<visitedMNC>.**mcc**<visitedMCC>.3gppnetwork.org). GSMA IREG is asked for confirmation. An alternative NAI shall not be routeable by any AAA-Server. The REALM part of the alternative NAI shall be "nonrouteable.3gppnetwork.org".

Open issue:

- GSMA has to approve the domain name. A reply LS from GSMA should be received at plenary.
- Charging address-, response LS from SA5 and SA2 still outstanding.
- Is it allowed that the WLAN UE uses the temporary identifier received in the Scenario 2 authentication in the subsequent Scenario 3 authentication procedure, or should these authentication procedures be completely separated (i.e. in the first Scenario 3 authentication the IMSI should be used)? Question to SA2 N4-041589
- The outcome of SA2#43 has to be checked and stage 3 has to be aligned.

Status

Work is seen as completed.

Subscriber and equipment Trace

CN4 has discussed CRs on Subscriber and equipment trace and has identified some open issues.

SA5 is asked to clarify the following issues:

- A number of cases in 32.422 protocol values are included for Vendor Specific Extensions/settings (e.g. Triggering Events, Trace Depth). CN4 does not understand how such values can be implemented across an open inter-vendor interface. CN4 believes that these values should be removed from the referenced protocol. Any vendor may implement proprietary extensions but these are by definition outside the 3GPP specification realm.
- The MGW Trace interfaces are listed as ATM, IP and TDM. These are not interfaces, but transport technologies. In the CR to 29.002 Nokia proposed that the interfaces should be Nb and Mc, which is accoridng to one part of 3GPP TS 32.422. This is more viable but this then raises the question if Iu should also be included in this list. CN4 requests that SA5 specifications are updated and aligned accordingly.
- The MSC interfaces do not include Nc, is this correct?
- Should the Mn interface also be traced?
- A further question regarding the MGW trace interfaces: Is it logical that the Mc interface should be traced from the MGW, when the signalling to trigger this comes from the MSC via the Mc interface. Thus for the MSC to support the trace package it could also perform the Mc interface tracing.
- The MGW Trace Record is not defined yet in 32.423 and thus it is not clear what is to be traced in the MGW at all. Should this be tracing User Plane Control messages? Inband Signalling? User Data?
- In the MAP Trace Activation message CR it was proposed that the Trace Depth is signalled but this is not clear what it means to each node and references 32.423 which is still in draft.
- In the MAP Trace Activation message CR it was proposed that Trace Depth value is signalled as a single value – (single value means that the same value is valid for every network element) is this correct or should it be per Network Element? The latter seems more appropriate if some Network Elements cannot perform all trace levels – for example in 32.422 "medium" is defined as including Radio Measurement IEs.
- In the Management Based Activation it is seen that each node needs the IMSI or IMEI(SV) as well. It is thus questioned if the Mc interface should also be designed to be used for indicating only the IMEI(SV) or IMSI for this case. So, CN4 would like to ask SA5 to provide in their associated specifications a detailed list of the information that needs to be signalled in the different interfaces for Management and Signalling trace activation and deactivation.
- CN4 also believe that it should be possible that a tracing can be activated based on IMEI(SV) and IMSI combination in HLR. Notice that it is already possible that IMEI(SV) is available in the HLR. Does SA5 believe that the associated specifications cover this case also?
- CN4 would also like to ask SA5 if it is possible to add MSISDN as a possible subscriber ID for trace.

Status

CN4 ask for an exception to introduce trace in Release 6. Requirements need to be verified by SA5. We expect to receive a response at our next meeting.

Mn interface protocol

No contributions this time.

Open issue:

It needs to be checked which of the restriction on Mc interface are also relevant for Mn Interface.

Status

Work is seen as completed.

Mp interface protocol

No contributions till now.

Status

The meeting agreed this work should be moved out of Release 6.

GPRS (NP-040545)

We discussed the issue on IPv4 and IPv6 capable SGSNs in a pool and how or when the SGSN should use IPv6 address to communicate with another SGSN. A change seams to be only acceptable for release 6 onwards. The discussion will be continued.

We agreed to add some clarifications related SGSN supporting IPv4 only when receiving IPv4 and IPv6 addresses .

No open issues are identified in the moment for Rel-6.

MBMS (NP-040540)

CN4 agreed a CR to be able to indicate in session start procedure wether the session is for multicast or for broad cast service. Parameters to provide the GGSN and SGSN with information about MBMS session duration and MBMS service area are added as well.

A support indicator is agreed to be introduced to inform the old SGSN about the capability regarding MBMS support by the new SGSN in case of inter SGSN routing area update.

Open issue:

- Length of MBMS-service ID,
- Security, alignment with 3GPP TS 33.246

Status

The work is seen as completed, alignment with other specification due to changes agreed by other working groups and provided to this plenary might be needed.

MAP security (NP-040535)

CN4 has received a LS from GSMA IREG. They are requesting the TCAP Handshake as soon as possible. In addition GSMA IREG request the MAPsec work to be completed because they are concerned that as the trusted status of SS7 networks has been discredited, that other more evil attacks may follow. GSMA IREG requests that the architecture must support the use of "gateways" which perform the appropriate authentication/encryption of MAP messages between pairs of PLMNs. If it is not possible to deliver a gateway solution then they see little or no point in continuing the MAPsec specification because it will take too long to rollout and turn on.

CN4 agreed the MAP CR (Rel-6) to introduce TCAP handshaking for SMS.

Regarding the second request from GSMA IREG on a Gateway approach for MAP sec. CN4 understanding is that this is an architectural issue which needs to be first discussed and decided by SA3. In CN4s understanding it is an SA3/SA decision in which release the gateway approach for MAPsec shall be introduced.

CAMEL phase 4+ (NP-040544)

Corrections on SDLs in 23.078 the stage 2 of CAMEL are agreed.

Status

The work is seen as completed

Diameter coordination (NP-040579)

29.230 is continuously updated and aligned with interface specification on interfaces using DIAMETER as basis.

Open issue:

- All AVPs and error codes for I-WLAN should be added within 29.230.
- The content of 29.230 has to be aligned with other stage 3 specification using DIAMETER as basis.

IMS2; Cx & Dx & Sh interfaces (NP-040530, NP-040531, NP-040532)

We agreed on a number of small corrections on Cx and Sh related to data definition, data checks and error handling.

Open issue:

- Shared public identities on Sh interface
  Outcome of SA2#43 needs to be checked

Status

The work is seen as nearly completed.

Earl IMS security

The CRs to 29.228 and 29.229 on Early IMS security where acknowledged to be technically correct, however CN4 were reluctant to document the early IMS security impacts within those specs. As an alternative these descriptions could go into TR 33.878.

Status

SA3 is asked for guidance on how to proceed with this functionality (see LS N4-041605).

Mc interface protocol (NP-040548)

H248 version 2 and Q1950 (12/2002) is agreed as basis for Release 6. We agreed in referencing Q1950 (12/2002)

LCS (NP-040542)

We agreed a CR (29.002 753 Rel-6) to support location based routing for emergency calls in North America, an MSC can request an ESRK from the GMLC using the NI-LR procedure defined in 3GPP TS 23.271.

A set of CRs to solve the problem that MO-LR positioning operations could fail due to premature expiration of timer T(LCSL) is only agreed for Release 6 (N4-041352). Another set of CRs on a missing description on the handling of SS timer T(LCSN) and T(LCSL) for LCS operation, which may lead to incorrect implementations and errors in operation is only agreed for Release 6 (N4-041682). They are not seen as a serious and frequent mis-operation. The CRs back to R98 are rejected only the release 6 version of the CRs are agreed

Status

The work is seen as completed.

ASCI (NP-040534)

CN4 approved a CR to support Ciphering for Group calls. No enhancements regarding hand over procedures are agreed.

SCUDIF

Not handled due to late arrival, companies have requested more time to check the CRs. Due to lack of time CRs are not presented and discussed.

2.2   Release 5 and earlier

We have no CRs for R99 onwards and only 3 set of CRs for Rel-4 onwards all other CRs starting with Rel-5.

IMS, Cx & Dx & Sh interfaces (NP-040523, NP-040578)

The current specification on Sh and Cx intertface does not specifiy indetail the handling of the notes for mandatory, conditional and option information elements, when one of those information elements are missing in received request. We agreed to add an descrriptive text to both interface specifications.

In TS 29.228 the description of the HSS initiated deregistration does not mention the registration state at the end of the procedure for the public identities of the user being deregistered. A text agreed to be added that if the de-registration occurs due to a server change or a server removal, the HSS should update the registration state with the "not registered" value. This action should be the last step of the procedure after the S-CSCF responds to the HSS.

CAMEL (NP-040525)

To avoid possible hanging dialogues in case of multiple reporting related to the same Call Segment. The rules for the outstanding request counter are updated.

OoBTC/TrFO (NP-040520)

CN4 discussed a problem caused by the incompatibility between the UMTS_AMR and the FR_AMR codec in certain TFO-TrFO-TFO interworking scenarios. CN4 agreed a CR to TS 23.153 that UMTS_AMR and UMTS_AMR_2 shall only be considered as TFO- and TrFO- compatible, when used in a single mode configuration

with the same mode, and approved the CR from Release 4 onwards. SA4 was asked in a LS to align their specification (28.082, 26.103) with this change. SA4 has agreed the corresponding changes to their specification.

In addition we agreed on a descriptive text on the use of the "Optimsiation mode" parameter, the handling of the Supported Codec's List, Available Codec's List and Selected Codec in the BICC protocol.

Mc interface protocol (NP-040529)

We agreed a set of restriction for Rel5 29.232 related to H248. the agreed restriction does not effect the procedures required for Mc interface. They are agreed basically for interoperability issues.

We agreed in referencing Q1950 (12/2002). For Release 5 we agreed to add a note that Mc interface is based on H248 version 1.

The discussion on the usage of topology descriptor in case of rate control during relocation is postponed to next meeting due to lack of time.

2.3   GSM

None.

3   Questions for advice and decision

CN4 asks for exceptions related to GUP and subscriber and equipment trace to be completed in March for Release 6.

4   Work organisation

4.1   Work Item descriptions

We agreed to split the work item on trace is in two parts. The IMS part on trace is moved out of Release 6 time frame.

We agreed a new work Item on Camel "CAMEL Trunk Originated Trigger Detection Points". The WID introduces to enable CSE interaction for trunk-originated calls at the MSC/ SSP (e.g. access matrix in SSP).

The Work item on Emergency Call Enhancements for IP& PS Based Calls – stage 3 is updated it covers now Emergency calls for the PS domain, therefore 29.060 is impacted. CN4 has endorsed the WID.

4.2   Review of the work plan

The work plan was updated during the meeting. The updates should be covered in the version of the work plan which is published before CN#26.

4.3   Release 6 specification

We have checked the Release 5 specifications for which we do not have any Release 6 versions. CN4 has only identified the TR on SUA which shall not be moved to Release 6.

5   CN4 meeting calendar

The complete list of meetings is shown in the tables below till the end of 2004 and proposed dates for 2005.

Table 1: CN4 meeting calendar

Date	Meeting	Place	Host
08 -10 Dec 2004	CN plenary #26	Athene, GREECE	European Friends of 3GPP
14-18 Feb 2005	CN4#26	Sydney, Australia	Japanese Friends of 3GPP, Vodafone
09 – 11 March 2005	CN plenary #27	Tokyo; JAPAN	Japanese Friends of 3GPP
25-29 Apr. 2005	CN4#27	Cancun, Mexico	US Friends of 3GPP
01 – 03 June 2005	CN plenary #28	Tallin; ESTONIA	EF3
15-19 Aug 2005	CN4#28	London, GB	EF3
21 – 23 Sept. 2005	CN plenary #29	TBD; Canada	US Friends of 3GPP
31 Oct - 4 Nov 2005	CN4#29	EU	TBD
30 Nov – 2 Dec 2005	CN plenary #30	TBD, MALTA	EF3

6   Change Requests

CN4 produced 113 Change Requests which are submitted for ratification. An overview of the CR packages is provided in Table 3. Corrective CRs to Release 5 and earlier were agreed as critical corrections, unless there is an indication to the contrary.

Table 3: CRs submitted by CN4 for approval at CN #25 (sorted by agenda item)

Tdoc	Agenda	Type	Tdoc Title	WI	Rel
NP-040520	7.7	CR PACK	CRs to Rel-4 on Work Item OoBTC	OoBTC	Rel-4
NP-040521	7.8	CR PACK	CRs to Rel-4 on Work Item CCSPLIT	CSSPLIT	Rel-4
NP-040522	7.11	CR PACK	CRs to Rel-4 on on Work Item small Technical Enhancements and Improvements on Supplementary Services	TEI4	Rel-4
NP-040523	8.1	CR PACK	CRs to Rel-5 on Work Item IP-based multimedia services Cx-/Dx-interface	IMS-CCR	Rel-5
NP-040578	8.1	CR PACK	CRs to Rel-5 on Work Item IP-based multimedia services Sh-interface	IMS-CCR	Rel-5
NP-040525	8.3	CR PACK	CRs to Rel-5 on Work Camel 4	Camel4	Rel-5
NP-040526	8.8	CR PACK	CRs to Rel-5 on Work Item small Technical Enhancements and Improvements on GPRS	TEI5	Rel-5
NP-040527	8.8	CR PACK	CRs to Rel-5 on Work Item small Technical Enhancements and Improvements on Clarification of NRI position within (P) -TMSI	TEI5	Rel-5

NP-040528	8.8	CR PACK	CRs to Rel-5 on Work Item small Technical Enhancements and Improvements	TEI5	Rel-5
NP-040529	8.9	CR PACK	CRs to Rel-5 on Work Item small Technical Enhancements and Improvements on Mc-Interface	TEI5	Rel-5
NP-040530	9.1	CR PACK	CRs to Rel-6 on Work Item IP-based multimedia services Cx-/Dx-interface	IMS2-CCR	Rel-5
NP-040531	9.1	CR PACK	CRs to Rel-6 on Work Item IP-based multimedia services Sh-interface	IMS2-CCR	Rel-5
NP-040532	9.1	CR PACK	CRs to Rel-6 on Work Item IP-based multimedia services on Subscriber data handling	IMS2	Rel-6
NP-040579	9.1	CR PACK	CRs to Rel-6 on Work Item IP-based multimedia services on Diameter Coordination	IMS2/TEI6	Rel-6
NP-040534	9.3	CR PACK	CR to Rel-6 on Key Management of group keys for Voice Group Call Services	SECGKYV	Rel-6
NP-040535	9.3	CR PACK	CR to Rel-6 on MAP Security	TEI6	Rel-6
NP-040580	9.3	CR PACK	CRs to Rel-6 on Subscriber Certificates	SEC1-SC	Rel-6
NP-040537	9.6	WID	Updated WID on GUP	GUP	Rel-6
NP-040538	9.6	TS	3GPP TS 29.240 Generic User Profile v1.0.0 for information	GUP	Rel-6
NP-040539	9.6	TR	3GPP TR 23.941 3GPP Generic User Profile (GUP); Data Description Method (DDM) v2.0.0 for approval	GUP	Rel-6
NP-040540	9.8	CR PACK	CRs to Rel-6 on Work Item Multimedia Broadcast and Multicast Service	MBMS	Rel-6
NP-040581	9.17	CR PACK	CRs to Rel-6 on WLAN	WLAN	Rel-6
NP-040542	9.18	CR PACK	CRs to Rel-6 on Location Services	LCS2	Rel-6
NP-040543	9.19	CR PACK	CR to Rel-6 on Network Sharing	NetShar	Rel-6
NP-040544	9.21	CR PACK	CRs to Rel-6 on Work Item small Technical Enhancements and Improvements on Camel	TEI6	Rel-6
NP-040545	9.21	CR PACK	CR to Rel-6 on Work Item small Technical Enhancements and Improvements on GPRS	TEI6	Rel-6
NP-040546	9.21	CR PACK	CRs to Rel-6 on Work Item small Technical Enhancements and Improvements on MAP	TEI6	Rel-6
NP-040547	9.21	CR PACK	CR to Rel-6 on Work Item small Technical Enhancements and Improvements on Mc-interface	TEI6	Rel-6
NP-040548	9.21	CR PACK	CR to Rel-6 on Work Item small Technical Enhancements and Improvements on OoBTC	TEI6	Rel-6
NP-040549	9.22	WID	Updated Work Item Description on Trace Management, stage3, network	OAM-Trace	Rel-6
NP-040550	10.1	WID	CAMEL Trunk Originated Trigger Detection Points	EDCamel	Rel-7

6.1 Release 5 (and earlier) CRs

Corrective CRs to Release 5 and earlier are agreed as **essential corrections**.

6.1.1 TEI4; Corrections on OoBTC (NP-040520); Release 4

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
23.153	075		1301	Rel-4	TFO/TrFO compatibility of UMTS_AMR and UMTS_AMR2	F	4.10.0
23.153	076		1302	Rel-5	TFO/TrFO compatibility of UMTS_AMR and UMTS_AMR2	A	5.8.0
23.153	77	1	1518	Rel-4	Detailed description of the handling of codec negotiation parameters	F	4.10.0
23.153	78	1	1519	Rel-5	Detailed description of the handling of codec negotiation parameters	A	5.8.0
23.153	79	3	1701	Rel-4	Addition of missing condition for transcoder free operation in the MGW	F	4.10.0
23.153	80	3	1702	Rel-5	Addition of missing condition for transcoder free operation in the MGW	A	5.8.0

6.1.2 CSSPLIT ; Corrections on distant codec list (NP-040521); Release 4

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.232	077		1309	Rel-4	Correction of distant codec list	F	4.9.0
29.232	078		1310	Rel-5	Correction of distant codec list	A	5.8.0

6.1.3 TEI4; Corrections on Supplementary Services (NP-040522); Release 4

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
24.080	040	1	1664	Rel-4	Sequence numbering for SS via PS	F	4.3.1
24.080	041	1	1665	Rel-5	Sequence numbering for SS via PS	A	5.4.0
24.080	042	1	1666	Rel-6	Sequence numbering for SS via PS	A	6.1.0

6.1.4 IMS-CCR ; Corrections on IMS Cx-interface (NP-040523); Release 5

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.228	149		1341	Rel-5	Regular Expressions	F	5.9.0
29.228	150		1342	Rel-6	Regular Expressions	A	6.4.0
29.229	069		1343	Rel-5	Cx ABNF corrections	F	5.8.0
29.229	070		1344	Rel-6	Cx ABNF corrections	A	6.2.0
29.228	137	1	1561	Rel-5	HSS initiated deregistration with "not registered" registration state	F	5.9.0
29.228	138	1	1562	Rel-6	HSS initiated deregistration with "not registered" registration state	A	6.4.0
29.228	160	2	1565	Rel-5	Handling of Information Element marked as (M), (C) or (O)	F	5.9.0
29.228	159	2	1566	Rel-6	Handling of Information Element marked as (M), (C) or (O)	A	6.4.0
29.228	141	2	1647	Rel-5	HSS initiated deregistration using the network initiated de-registration procedure	F	5.9.0
29.228	142	2	1648	Rel-6	HSS initiated deregistration using the network initiated de-registration procedure	A	6.4.0

6.1.5 IMS-CCR ; Corrections on IMS Sh-interface (NP-040578); Release 5

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.328	110		1560	Rel-5	Access Key for Charging Information	F	5.7.0
29.328	104		1465	Rel-6	Access Key for Charging Information	A	6.3.0
29.329	052		1345	Rel-5	Sh ABNF corrections	F	5.7.0
29.329	053		1346	Rel-6	Sh ABNF corrections	A	6.2.0
29.328	109	2	1567	Rel-5	Handling of Information Element marked as (M), (C) or (O)	F	5.7.0
29.328	110	2	1568	Rel-6	Handling of Information Element marked as (M), (C) or (O)	A	6.3.0

6.1.6 TEI5; Corrections on CAMEL4 (NP-040525); Release 5

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
23.078	754		1423	Rel-5	Clarification on Outstanding Request Counter (ORC) handling at EDP-R or TDP-R resumption	F	5.8.0
23.078	748	5	1635	Rel-6	Clarification on Outstanding Request Counter (ORC) handling at EDP-R or TDP-R resumption	A	6.3.0

6.1.7 TEI5; Corrections on GPRS (NP-040526); Release 5

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.060	519	1	1659	Rel-5	Additional support of IPv4 and IPv6 node addresses in create PDP context procedure	F	5.11.0
29.060	520	1	1660	Rel-6	Additional support of IPv4 and IPv6 node addresses in Create PDP and MBMS context procedures.	F	6.6.0

6.1.8 TEI5; Corrections on NRI (NP-040527); Release 5

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
23.003	094	1	1667	Rel-5	Clarification of NRI position within (P)-TMSI	F	5.9.0
23.003	095	1	1668	Rel-6	Clarification of NRI position within (P)-TMSI	A	6.4.0

6.1.9 TEI5; Corrections on OoBTC (NP-040528); Release 5

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.232	079		1333	Rel-5	IP transport package Duplicate property ID in ASN.1 encoding	F	5.8.0
23.153	081		1401	Rel-5	Correction of the inter-MSC handover during TrFO	F	5.8.0

6.1.10 TEI5; Corrections on Mc Interface (NP-040529); Release 5

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.232	082		1434	Rel-5	Embedded Events/Signals	F	5.8.0
29.232	084		1436	Rel-5	Multiple Streams Per Termination	F	5.8.0
29.232	081	1	1545	Rel-5	Correction to Q.1950 reference	F	5.8.0
29.232	080	1	1669	Rel-5	Scope Of H.248.1 base protocol.	F	5.8.0
29.232	085	1	1670	Rel-5	Overspecified and Underspecified Parameters	F	5.8.0
29.232	088	2	1674	Rel-5	Alignment of Mc procedures with command types as defined in stage 2	F	5.8.0

6.2 Release 6 CRs

6.2.1 IMS2-CCR ; Corrections on Cx-/Dx-interface (NP-040530); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.228	146	1	1458	Rel-6	Clarification of R6 authentication scheme	F	6.4.0
29.228	155		1549	Rel-6	Correction to XML Root Element	F	6.4.0
29.228	156	1	1550	Rel-6	Modification of User-Data-Already-Available in SAR command.	F	6.4.0
29.228	140	1	1563	Rel-6	HSS initiated deregistration with user profile removal for permanent termination	F	6.4.0

6.2.2 IMS2-CCR : Corrections on Sh-interface (NP-040531); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.328	102	2	1559	Rel-6	Only One Error Required for the AS Permissions Table Checking Procedure	F	6.3.0
29.328	103		1464	Rel-6	Default Handling of Error Cases	F	6.3.0
29.328	101	1	1611	Rel-6	Sh-Pull Data Download	F	6.3.0
29.328	097	2	1700	Rel-6	Removal of Notification of the Authentication Pending State upon Registration	F	6.3.0

6.2.3 IMS2 ; Corrections on Subscriber data handling for the IMS (NP-040532); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
23.008	136		1247	Rel-6	Optimization of User Profile Download	B	6.3.0
23.008	137		1248	Rel-6	Subscribed Media Profile Identifier	F	6.3.0

6.2.4 IMS2/TEI6 ; Corrections on Diameter Coordination (NP-040579); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.230	006		1337	Rel-6	Inclusion of missing Cx AVPs	F	6.1.0
29.230	011		1547	Rel-6	Gq interface allocations	C	6.1.0
29.230	009	1	1580	Rel-6	Addition of Gmb interface	F	6.1.0
29.230	012		1603	Rel-6	Addition of Gx interface	C	6.1.0
29.230	010	1	1654	Rel-6	Documenting the Reuse of the 3GPP specific application identifier of Ro for Re on the Charging Interfaces	C	6.1.0

6.2.5 SECGKYV ; Corrections on Key Management of group keys for Voice Group Call Services (NP-040534); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.002	746	1	1662	Rel-6	Introducing VGCS/VBS ciphering	B	6.7.0

6.2.6 TEI6 ; Corrections on MAP Security (NP-040535); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.002	740	2	1641	Rel-6	SMS Fraud countermeasures	F	6.7.0

6.2.7 SEC1-SC ; Corrections on Subscriber certificates (NP-040580); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.109	001		1316	Rel-6	Authorization Flag Code Annex	B	6.0.0
29.109	002		1317	Rel-6	Finalization of GAA Service Identifier	B	6.0.0
29.109	005		1320	Rel-6	Structure to GAA Service Indentifier	B	6.0.0
23.008	140		1324	Rel-6	Correction to authorization flag definition	F	6.3.0
29.109	009		1500	Rel-6	Introduction of NAF groups	B	6.0.0
29.109	003	1	1609	Rel-6	BSF control information (bsfInfo) tag to GUSS	B	6.0.0
29.109	006	1	1610	Rel-6	Finalisation of terminology	F	6.0.0
23.008	138	1	1612	Rel-6	Domain independent GAA	F	6.3.0
23.003	096	1	1613	Rel-6	BSF address	F	6.4.0
29.109	008	1	1614	Rel-6	Command code 310 Zn messages	B	6.0.0
29.230	007	1	1615	Rel-6	Reservation of command code 310	F	6.1.0
23.008	141		1616	Rel-6	Introduction of NAF Groups	F	6.3.0

6.2.8 MBMS ; Corrections on MBMS (NP-040540); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.060	524		1452	Rel-6	GTP-C tunnel for MBMS broadcast	F	6.6.0
29.060	514	1	1657	Rel-6	Addition of IEs to MBMS Session Start Request message	F	6.6.0
29.060	515	1	1658	Rel-6	Introduction of MBMS support indication between SGSNs	F	6.6.0

6.2.9 WLAN ; Corrections on WLAN (NP-040581); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.234	001	2	1694	Rel-6	PLMN advertising and selection	D	6.0.0
29.234	002		1362	Rel-6	WLAN User Profile update	F	6.0.0
29.234	003		1363	Rel-6	Charging related data from 3GPP AAA Server to PDG	B	6.0.0
29.234	004	1	1527	Rel-6	3GPP WLAN IP Access parameter rename	B	6.3.0
29.234	005	1	1577	Rel-6	Static Remote IP address	F	6.0.0
29.234	006		1366	Rel-6	Removal of "Scenario" wording	D	6.0.0
29.234	007		1367	Rel-6	Editorial correction on Auth-Req-Type AVP	D	6.0.0
29.234	008	1	1578	Rel-6	Online charging failure report	F	6.0.0
29.234	009		1369	Rel-6	Rejection of Multiple WLAN connections	B	6.0.0
29.234	010		1371	Rel-6	Application-Ids to Wa, Wd, Wm and Wg	F	6.0.0
29.234	012	2	1695	Rel-6	Wd Interface RADIUS profile clarifications	F	6.0.0
29.234	014	2	1696	Rel-6	RADIUS Profile for Wa and Wd	F	6.0.0
29.234	015	1	1585	Rel-6	Addition of ABNF definitions missing onWa, Wd Wm, Wg interfaces	B	6.0.0
29.234	016	1	1586	Rel-6	Access Independence for WLAN 3GPP IP access	B	6.0.0
29.234	019	1	1591	Rel-6	Editorial Modifications	D	6.0.0
29.234	021	1	1592	Rel-6	Re-authentication clarification on the Wa interface	F	6.0.0
29.234	023	1	1593	Rel-6	To replace 'Permanent User ID' by 'User Id'	F	6.0.0
29.234	025	2	1697	Rel-6	To make VPLMN-Id Conditional in Wd interface	F	6.0.0
29.234	026		1414	Rel-6	Addition of calling station id in DEA. Deletion of the same from DER.	F	6.0.0
29.234	028	1	1596	Rel-6	Editorial Changes	D	6.0.0
29.234	029		1481	Rel-6	Handling of Information Element marked as (M), (C) or (O)	D	6.0.0
23.003	092	2	1693	Rel-6	'otherrealm' format of Decorated NAI	F	6.4.0
23.003	093	1	1575	Rel-6	Definition of Alternative NAI	B	6.4.0
23.008	142	1	1572	Rel-6	WLAN-IW data handling: additions to 23.008	B	6.3.0

6.2.10 LCS2 ; Corrections on LCS2 (NP-040542); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.002	747		1272	Rel-6	Incorrect Implementation of CR 731	F	6.7.0
29.002	748	1	1684	Rel-6	LCS Capability Handling for UE's	F	6.7.0
29.002	753	1	1685	Rel-6	Enable NA-ESRD Provision from a GMLC for E911 Location in North America	F	6.7.0
24.080	038		1352	Rel-6	Correction of setting for timer T(LCSL)	F	6.1.0
24.030	020	1	1682	Rel-6	Correction of missing description for T(LCSN) and T(LCSL)	F	6.1.0

6.2.11 NetShar ; Corrections on Network Sharing (NP-040543); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
23.008	135		1361	Rel-6	Inclusion of selected CN operator ID parameter	B	6.3.0

6.2.12 TEI6 ; Corrections on CAMEL (NP-040544); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
23.078	752		1420	Rel-6	Correction to Change of Position handling in gsmSSF	F	6.3.0
29.078	390		1422	Rel-6	Correction of wrong TS numbers in references	F	6.3.0
23.078	749	2	1631	Rel-6	Correcting SDL of Process CS_gsmSSF (sheet 62)	F	6.3.0
23.078	757	1	1632	Rel-6	Warning Tone	F	6.3.0
23.078	753	1	1633	Rel-6	Correction in Sheet 18 of Process CSA_gsmSSF	F	6.3.0

6.2.13 TEI6 ; Corrections on GPRS (NP-040545); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.060	513	1	1677	Rel-6	Clarification on the usage of the Alternative GGSN Address	F	6.6.0

6.2.14 TEI6 ; Corrections on MAP (NP-040546); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.002	752		1477	Rel-6	Correction to the service response parameters of ATI	F	6.7.0
29.002	757	2	1683	Rel-6	Clarification about returning authentication data for a subscriber (GSM or UMTS)	F	6.7.0

6.2.15 TEI6 ; Corrections on Mc Interface (NP-040547); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.232	092		1444	Rel-6	Update of referenced H.248.1 version to version 2	F	5.8.0

6.2.16 TEI6 ; Corrections on OoBTC (NP-040548); Release 6

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
23.153	074	1	1622	Rel-6	3GUP properties correction	F	5.8.0

7   Draft Technical specifications and reports

Stage 3 release 6 technical Specification is sent for Information to plenary:

NP-040538; 3GPP TS 29.240 1.0.0 Gerneric User Profile is seen as more then 50% complete

Stage 3 release 6 technical Report is sent for approval to plenary:

NP-040539; 3GPP TR 23.941 Generic user Profile; data description method. This specification is based on 3GPP TS 23.241. Due to the fact that we are using Liberty alliance as basis for the protocol CN4 agreed that instead of changing the TS and maintaining the two TS's. It is better to incorporate 23.241 in 29.240 and do the maintenance only for 29.240. We agreed to change the TS into a TR to keep the work done by T2.

8   Acknowledgments

I want to thank the delegates for the hard work and for the active and long discussions. I also want to thank Kimmo Kymäläinen for providing the excellent support during and between the meetings.

The CN4 participants have been prolific in producing documents (this was the meeting with the highest number of documents of the last years in CN4). We have worked some long days – however we did manage to have a social event during our meeting in Seoul. (WG chairmen and some delegates could get some practice in using their voice not only for discussions….).

Finally, I would like to thank the host of our meeting Samsung for excellent hosting of the meeting.